

# RTI PORT and Interface Support

Project Director: Christina Bouwens

Lead Engineer: Wesley Braudaway, Ph.D.

## Description of the Effort

- Support Ada API development;
- Port and Test RTI Version F.0 to IBM RISC;
- Develop and Test Ada API to C++ Interface Binding code;
- Demonstrate Port and Language Interface using CCTT SAF Federate with a JPSPD Federate.

## Port Status

- C++ Version of RTI F.0 Successfully Ported to IBM RISC/6000 (Model 43P) under AIX 4.1.4
- Lessons Learned
  - RTI and Applications compiled and linked thread safe,
  - Type scoping issues,
  - Portability of Makefile
  - Several IBM compiler specific issues,
  - Need to select and freeze a version of ACE to be used for RTI
  - Need SLHS patch to AIX 4.1.4 for ACE
- Provided to DMSO RTI Test Support

# Ada API to C++ Binding

- Coded and Peer Reviewed
  - (included Reed Little, SEI)
  - No exception propagated currently implemented
  - Immediate returned values to RTI from Federate Amb. methods not currently implemented (ownership transfer).
- Started Testing Effort
  - RISK: Starting to see some compiler interoperability problems between the Ada and C++ compilers
  - OC Systems (Ada compiler vendor) is supporting this activity

# API Binding Design

